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said substrates are sequentially one by one loaded and unloaded in order between the cassettes and said plural vacuum processing chambers, and said substrates are treated in said plural vacuum processing chambers with surfaces thereof which are treated being horizontal, and  
said vacuum processing chambers carry out a process-  
ing selected from the group consisting of dry etching, chemical vapor deposition and sputtering.

10 A vacuum processing apparatus, comprising  
a first loader provided with a conveying structure for  
conveying substrates,  
a second loader provided with a convey chamber, another  
conveying structure and plural vacuum processing  
chambers, and  
lock chambers for connecting said first loader and said  
second loader,

wherein  
said first loader includes a cassette mount unit located  
outside of said lock chambers,  
said cassette mount unit has a cassette positioning plane 20  
in which all cassettes, containing substrates to be  
processed, are positioned in a single row in front of  
said lock chambers,  
said first loader is disposed in front of the lock cham-  
bers between said cassette mount unit and said lock 25  
chambers,  
said lock chambers are respectively provided with both  
an inlet and an outlet located in a horizontal line,  
the substrates are transferred from said first loader to  
said second loader and from said second loader to 30  
said first loader,  
said substrates are loaded and unloaded between the  
cassettes and said plural vacuum chambers, and  
said substrates are treated in said plural vacuum pro-  
cessing chambers with surfaces thereof which are 35  
treated, being horizontal

11 A vacuum processing apparatus, comprising  
a first loader provided with a first conveying structure for  
conveying substrates,  
a second loader provided with a convey chamber, a 40  
second conveying structure and plural vacuum process-  
ing chambers, and  
lock chambers for connecting said first loader and said  
second loader, wherein  
each of said plural vacuum processing chambers has a  
substrate table, to maintain a surface of a substrate 45  
which is treated horizontal during a vacuum process-  
ing therein, so that said surface is horizontal during  
treatment in the plural vacuum processing chambers,  
said first loader includes cassette tables disposed adj-  
acent to and in parallel with each other located outside 50  
of said lock chambers,  
the substrates are transferred, one by one, from said  
first loader to said second loader and from said  
second loader to said first loader,  
each of said cassette tables has a cassette positioning 55  
plane disposed substantially horizontally,  
said second conveying structure is located in said  
convey chamber to transfer each substrate between  
one of said lock chambers and one of said plural  
vacuum processing chambers, such that said sub- 60  
strates are placed on and removed from said sub-  
strate table with said surface horizontal,  
the two conveying structures sequentially load and  
unload from the cassettes into said plural vacuum  
processing chambers, and  
said plural vacuum processing chambers carry out a 65  
processing selected from the group consisting of dry  
etching, chemical vapor deposition and sputtering.

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12. A vacuum processing apparatus, comprising  
a first loader provided with a first conveying structure for  
conveying substrates,  
a second loader provided with a convey chamber, a  
second conveying structure and plural vacuum process-  
ing chambers, and  
lock chambers for connecting said first loader and said  
second loader,

each of said plural vacuum processing chambers having a  
substrate table to maintain a surface of a substrate,  
which is treated in the vacuum processing chambers,  
horizontal during a vacuum processing, so that the  
plural vacuum processing chambers treat said sub-  
strates with the surface thereof which is treated, being  
horizontal,

said first loader including cassette tables disposed adj-  
acent to and in parallel with each other located outside  
of said lock chambers, and

each of said cassette tables having a cassette positioning  
plane disposed substantially horizontally, wherein  
said two conveying structures transfer the substrates  
from said first loader to said second loader and from  
said second loader to said first loader,

said conveying structure located in said convey cham-  
ber acts to transfer each substrate between one of  
said lock chambers and one of said plural vacuum  
processing chambers, such that said substrates are  
placed on and removed from said substrate table with  
a surface thereof which is treated, being horizontal,  
said two conveying structures load and unload between  
the cassettes and said plural vacuum processing  
chambers, and

said vacuum processing chambers carry out a process-  
ing selected from the group consisting of dry  
etching, chemical vapor deposition and sputtering.

13. A vacuum processing apparatus, comprising

a first loader provided with a first conveying structure for  
conveying substrates,

a second loader provided with a convey chamber, a  
second conveying structure and plural vacuum process-  
ing chambers; and

lock chambers for connecting said first loader and said  
second loader, wherein

each of said plural vacuum processing chambers has a  
substrate table to maintain a surface of a substrate,  
which is treated in the vacuum processing chambers,  
horizontal during a vacuum processing, so that the  
plural vacuum processing chambers treat said sub-  
strates with the surface thereof which is treated,  
being horizontal,

said first loader includes cassette tables disposed adj-  
acent to and in parallel with each other located outside  
of said lock chambers,

each of said cassette tables has a cassette positioning  
plane disposed substantially horizontally,

said second conveying structure is located in said  
convey chamber to transfer each substrate between  
one of said lock chambers and one of said plural  
vacuum processing chambers, such that said sub-  
strate is placed on and removed from said substrate  
table with a surface thereof which is treated, being  
horizontal, and

said substrate is loaded and unloaded from a cassette,  
of said cassettes, into said plural vacuum processing  
chambers by said two conveying structures

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